

REMARKS

Claim Rejections – 35 USC § 112, Second Paragraph

The Examiner has rejected Claims 2-5 of the present application under 35 USC 112, second paragraph, contending that the claims are indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner indicates that the claims refer to “the resulting polymer” but fail to indicate any reaction or process which produces a “resulting polymer.”

To obviate the rejection, the applicants have amended Claims 2-5 to replace the term “the resulting polymer” with the phrase “grafting the free-radical trapping species onto the polymer and forming a thermally-reversible bond between the free radical trapping species and the complementary, thermally-reversible bond contributor yields.” This amendment is supported by the specification as originally filed in several places, including page 3, lines 1-17, page 8, lines 1-15, line 24 – page 9, line 5, and page 14, line 33 – page 15, line 2.

Claim Rejections – 35 USC § 102(e)

The Examiner has rejected Claims 1-5 and 7-10 of the present application under 35 USC 102(e) as being anticipated by US20060047098 (Anna). The applicants respectfully traverse.

The applicants have amended Claims 1, 7, 8, and 10 to indicate that the free radical trapping species is a hindered amine-derived stable organic free radical. These amendments are supported in the originally-filed specification at page 15, lines 3-7.

The present invention significantly teaches the use of a single component to (a) graft onto the polymer, (b) suppress degradation or carbon-carbon crosslinking of the polymer, and (c) provide a thermally-reversible bond contribution site. The cited reference does not teach nor identify the use of a component providing all of these characteristics.

The applicants believe that the amendment renders Claims 1, 7, 8, and 10 patentable over the cited reference. Furthermore, the applicants believe that Claims 2-5 and 9 which depend from the amended claims are also rendered patentable over the cited reference.

The Examiner has rejected Claims 7, 9, and 10 of the present application under 35 USC 102(e) as being anticipated by US Patent Serial No. 6,746,562 (Chino). The applicants respectfully traverse.

As previously noted, the applicants have amended Claims 7, 8, and 10 to indicate that the free radical trapping species is a hindered amine-derived stable organic free radical. The

applicants believe that the amendments highlight the significance of the present invention -- the use of a single component to (a) graft onto the polymer, (b) suppress degradation or carbon-carbon crosslinking of the polymer, and (c) provide a thermally-reversible bond contribution site. The cited reference does not teach nor identify the use of a component providing all of these characteristics. Furthermore, the applicants believe that Claim 9 which depends from amended Claim 8 is also now rendered patentable over the cited reference.

Claim Rejections – 35 USC § 103(a)

The Examiner has rejected Claim 6 of the present application under 35 USC 103(a) as being obvious over by US20060047098 (Anna). The applicants respectfully traverse.

As previously noted, the applicants have amended Claim 1 to indicate that the free radical trapping species is a hindered amine-derived stable organic free radical. The cited reference does not teach nor suggest the use of a hindered amine-derived stable organic free radical for (a) grafting onto a free-radical reactive polymer, (b) suppressing degradation or carbon-carbon crosslinking of the polymer, and (c) providing a thermally-reversible bond contribution site. The applicants believe that the amendment to Claim 1 rendered its dependent claims, including Claim 6, nonobvious over the cited reference.

In view of the above-described Amendments and Remarks, the applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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